COLSF
Colbert 7.3 V1

ecology and environment, inc.

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

International Specialists in the Environment

MEMORANDUM

DATE: July 21, 1989

TO: Neil Thompson, Remedial Project Manager, USEPA, Region 10

THRU: Ron Karpowicz, Program Manager, E & E, Region 9 RK

FROM: Roger McGinnis, Site Manager, E & E, Seattle RMM

SUBJ: Review Comments for Groundwater Monitoring Well Construction Plan
Colbert Landfill

REF: Contract Number 68-W9-0020
Work Assignment Number 20-05-0P01

CC: Joanne LaBav, Project Officer, USEPA, Region 10
Gerald McDonald, Project Manager, E & E, Region 10
Site File, E & E, Region 10

Attached are E & E's review comments on the Phase I Groundwater Monitoring Well Construction Plan for Colbert Landfill. If you have any questions, please feel free to contact me directly.

RM:rls

Enclosures

RECEIVED
JUL 21 1989
SUPERFUND BRANCH

USEPA SF
1414549

recycled paper

R & E REVIEW COMMENTS FOR THE COLBERT LANDFILL PHASE I GROUNDWATER MONITORING WELL CONSTRUCTION PLAN

Section 1.2 Site Conditions

Page 1-8 (para. 2, 3)

- Mention groundwater usage in the vicinity of the site: which aquifers are used, and the existance of any production wells in the area.

Section 2.0 Monitoring Well Construction

Page 2-1 (para. 1)

- Provide a reference to well locations (Figure GM-2.2).

Section 2.1 Drilling Procedures

Page 2-3 (para. 2)

- A larger well casing diameter should be considered depending on the anticipated use of these wells, i.e., pump tests, long-term monitoring, requirement of a pump for purging/sampling, etc.

Section 2.1.1 South System

Page 2-4 (para. 2) "However, the depth to groundwater (approximately 80 feet) and the relatively low contaminant concentrations make a soil/gas survey only marginally feasible for the south area."

- Soil gas may work very well especially if carbotrap adsorption tubes were employed followed by thermal desorption for GC analysis.

Page 2-6 (para. 2) "Soil samples will be collected during drilling activities for geologic logging purposes."

- There should be provisions for collecting soil samples for laboratory analysis, especially if contamination is encountered within the landfill area. Analytical results may be required for proper disposal of contaminated investigation-derived materials.

Section 2.1.2 West System

Page 2-10 (para. 2) "The temporary casing advanced during drilling will be downsized ("stepped down") in the Lacustrine Aquitard to create a seal and prevent downward migration of contamination from the Upper Sand/Gravel Aquifer."

- What is the resistance of the grout material to the contaminants encountered in the Sand/Gravel Aquifer? If the grout material is not compatible (easily degrades), leaving the steel or PVC conductor casing in place or using a grout compatible with the contaminants should be considered for additional protection.

Section 4.0 Disposal Procedures For Soil Cuttings And Excess Groundwater

Page 4-1 (para. 1) "Soil and ground water will be considered non-hazardous for borings/monitoring wells located at least 75 feet outside of the landfill refuse disposal area, provided residual volatile organic compounds are not detected at levels above background in vapors emitted from these materials."

- Groundwater and saturated soils should not be considered non-hazardous if they are within the area of the contaminant plume.

- Is there any concern, or any method to detect metals or other nonvolatile or semivolatile contaminants which may be in the investigation-derived materials?

Page 4-1 (para. 2) "Vapors emitted from soil cuttings and excess ground water will be screened using a photoionization meter."

- Photoionization detectors are relatively insensitive to chlorinated compounds except for chlorinated alkenes and aromatics.

- Water vapor produces interference with a photoionization detector.

Page 4-1 (para. 2) "Soil cuttings will be disposed of in the refuse disposal area if concentrations of volatile organic compounds are detected above background..."

- There does not appear to be any concern about direct volatile releases to the atmosphere, or of the disposed cuttings and water becoming another potential source. If contaminated investigation-derived material is dumped on the site, it may have to be redisposed off site at a later date. Consideration should be given to alternative methods of treatment or disposal

of the investigation-derived wastes. Legal issues associated with the proposed method of investigation-derived waste disposal should also be considered. At the minimum, investigation-derived wastes emanating from the landfill area, or from within the contaminant plumes should be segregated, sampled, and analyzed to evaluate proper methods of disposal.

- How will contaminated items such as tyveks and gloves be disposed?